



# Maximizing the Impact of Kisan Call Centers

Research shows that digital agricultural extension has the potential to increase yields

## Study Overview

In a study supported by the Tata-Cornell Institute for Agriculture and Nutrition (TCI), researchers analyzed more than 17 million queries to India's Kisan Call Centers, along with data on weather, crop yields, and the characteristics of farm households in the study area, to assess the impact of calls related to weather and pests on paddy yields.

## Background

The expansion of mobile phone networks in rural parts of India and other developing countries has enabled the expansion of digital extension services for farmers, which provide information and advice on topics like weather, input utilization, pest management, and market price fluctuations. India launched the Kisan Call Center program in 2004 to provide farmers with support in regional languages. At the call centers, extension agents with formal training in agricultural sciences respond to context-specific farming queries and offer tailored guidance. There are 21 call centers in total, with at least one in each state and union territory.

## RESULTS

The researchers found that a 1% increase in queries related to weather was associated with a 0.3% increase in average paddy yields, which can translate into substantial increases in production and income when scaled across large plots of farmland. The link between weather queries and yield suggests that weather forecasts can enhance farmers' preparedness and decision-making. With regard to pest-related queries, the researchers found that a 1% increase in calls was tied to a 1.1% decrease in paddy yields, likely because such calls were made only after pests had begun to damage crops.

## POLICY RECOMMENDATIONS

- Implement targeted enhancements to the Kisan Call Center system, such as artificial-intelligence-based triage of queries, region-specific pest alerts, and localized weather forecasting tailored to the timing and nature of farmers' needs.

Pramanik, C., Access to Digital Extension Services and Crop Yield: Evidence from Paddy Cultivation in India, *Agricultural Economics*, Volume 57, Issue 2, March 2026.

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